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      Horvath, Curt M
      Darnell Jr., James E
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Phe	Leu	Ala 35	Pro	Trp	Ile	Glu	Ser 40	Gln	Asp	Trp	Ala	Tyr 45	Ala	Ala	Ser	
Lys	Glu 50	Ser	His	Ala	Thr	Leu 55	Val	Phe	His	Asn	Leu 60	Leu	Gly	Glu	Ile	
Asp 65	Gln	Gln	Tyr	Ser	Arg 70	Phe	Leu	Gln	Glu	Ser 75	Asn	Val	Leu	Tyr	Gln 80	
His	Asn	Leu	Arg	Arg 85	Ile	Lys	Gln	Phe	Leu 90	Gln	Ser	Arg	Tyr	Leu 95	Glu	
Lys	Pro	Met	Glu 100	Ile	Ala	Arg	Ile	Val 105	Ala	Arg	Cys	Leu	Trp	Glu	Glu	

Ser Arg Leu Gln Thr Ala Ala Thr Ala Ala Gln Gln Gly Gly Gln 115 120 125

Ala Asn His Pro Thr Ala Ala Val Val Thr Glu Lys Gln Gln Met Leu 130 135 140

Glu Gln His Leu Gln Asp Val Arg Lys Arg 145 150

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<213> Mus musculus

<400> 9

Arg Cys Leu Trp Glu Glu Ser Arg Leu Leu Gln Thr Ala Ala Thr Ala 1 5 10 15

Ala Gln Gly Gly Gln Ala Asn His Pro Thr Ala Ala Val Val Thr
20 25 30

Glu Lys Gln Gln Met Leu Glu Gln His Leu Gln Asp Val Arg Lys Arg 35 40 45

Val Gln Asp Leu Glu Gln Lys Met Lys Val Val Glu Asn Leu Gln Asp
50 55 60

Asp Phe Asp Phe Asn Tyr Lys Thr Leu Lys Ser Gln Gly Asp Met Gln 65 70 75 80

Asp Leu Asn Gly Asn Asn Gln Ser Val Thr Arg Gln Lys Met Gln Gln 85 90 95

Leu Glu Gln Met Leu Thr Ala Leu Asp Gln Met Arg Arg Ser Ile Val 100 105 110

Ser Glu Leu Ala Gly Leu Leu Ser Ala Met Glu Tyr Val Gln Lys Thr 115 120 125

Leu Thr Asp Glu Glu Leu Ala Asp Trp Lys Arg Arg Pro Glu Ile Ala 130 135 140

Cys Ile Gly Gly Pro Pro Asn Ile Cys Leu Asp Arg Leu Glu Asn Trp 145 150 155 160

Ile Thr Ser Leu Ala Glu Ser Gln Leu Gln Thr Arg Gln Gln Ile Lys
165 170 175

Lys Leu Glu Glu Leu Gln Gln Lys Val Ser Tyr Lys Gly Asp Pro Ile 180 185 190

Val Gln His Arg Pro Met Leu Glu Glu Arg Ile Val Glu Leu Phe Arg 195 200 205

Asn Leu Met Lys Ser Ala Phe Val Val Glu Arg Gln Pro Cys Met Pro 210 215 220

Met His Pro Asp Arg Pro Leu Val Ile Lys Thr Gly Val Gln Phe Thr 225 230 235 240

Thr Lys Val Arg Leu Leu Val Lys Phe Pro Glu Leu Asn Tyr Gln Leu 245 250 255

Lys Ile Lys Val Cys Ile Asp Lys Asp Ser Gly Asp Val Ala Ala 260 265 270

<210> 10

<211> 393

<212> PRT

<213> Mus musculus

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Met Asn Met Glu Glu Ser Asn Asn Gly Ser Leu Ser Ala Glu Phe Lys 20 25 30

His Leu Thr Leu Arg Glu Gln Arg Cys Gly Asn Gly Gly Arg Ala Asn 35 40 45

Cys Asp Ala Ser Leu Ile Val Thr Glu Glu Leu His Leu Ile Thr Phe 50 55 60

Glu Thr Glu Val Tyr His Gln Gly Leu Lys Ile Asp Leu Glu Thr His 65 70 75 80

Ser Leu Pro Val Val Val Ile Ser Asn Ile Cys Gln Met Pro Asn Ala 85 90 95

Trp Ala Ser Ile Leu Trp Tyr Asn Met Leu Thr Asn Asn Pro Lys Asn 100 105 110

Val Asn Phe Phe Thr Lys Pro Pro Ile Gly Thr Trp Asp Gln Val Ala 115 120 125

Glu Val Leu Ser Trp Gln Phe Ser Ser Thr Thr Lys Arg Gly Leu Ser 130 135 140

Ile Glu Gln Leu Thr Thr Leu Ala Glu Lys Leu Leu Gly Pro Gly Val 145 150 155 160

Asn Tyr Ser Gly Cys Gln Ile Thr Trp Ala Lys Phe Cys Lys Glu Asn 165 170 175

Met Ala Gly Lys Gly Phe Ser Phe Trp Val Trp Leu Asp Asn Ile Ile 180 185 190

Asp Leu Val Lys Lys Tyr Ile Leu Ala Leu Trp Asn Glu Gly Tyr Ile 195 200 205

Met Gly Phe Ile Ser Lys Glu Arg Glu Arg Ala Ile Leu Ser Thr Lys 210 215 220

Pro Pro Gly Thr Phe Leu Leu Arg Phe Ser Glu Ser Ser Lys Glu Gly 225 230 235 240

Gly Val Thr Phe Thr Trp Val Glu Lys Asp Ile Ser Gly Lys Thr Gln \$245\$ \$250\$

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alifati, matematica de calidades

Ile Gln Ser Val Glu Pro Tyr Thr Lys Gln Gln Leu Asn Asn Met Ser Phe Ala Glu Ile Ile Met Gly Tyr Lys Ile Met Asp Ala Thr Asn Ile Leu Val Ser Pro Leu Val Tyr Leu Tyr Pro Asp Ile Pro Lys Glu Glu Ala Phe Gly Lys Tyr Cys Arg Pro Glu Ser Gln Glu His Pro Glu Ala Asp Pro Gly Ser Ala Ala Pro Tyr Leu Lys Thr Lys Phe Ile Cys Val Thr Pro Thr Thr Cys Ser Asn Thr Ile Asp Leu Pro Met Ser Pro Arg Thr Leu Asp Ser Leu Met Gln Phe Gly Asn Asn Gly Glu Gly Ala Glu 360 Pro Ser Ala Gly Gly Gln Phe Glu Ser Leu Thr Phe Asp Met Asp Leu 375 Thr Ser Glu Cys Ala Thr Ser Pro Met 390 <210> 11 <211> 154 <212> PRT <213> Mus musculus <400> 11 Met Ser Gln Trp Tyr Glu Leu Gln Gln Leu Asp Ser Lys Phe Leu Glu Gln Val His Gln Leu Tyr Asp Asp Ser Phe Pro Met Glu Ile Arg Gln 25 Tyr Leu Ala Gln Trp Leu Glu Lys Gln Asp Trp Glu His Ala Ala Asn Asp Val Ser Phe Ala Thr Ile Arg Phe His Asp Leu Leu Ser Gln Leu 55 Asp Asp Gln Tyr Ser Arg Phe Ser Leu Glu Asn Asn Phe Leu Leu Gln His Asn Ile Arg Lys Ser Lys Arg Asn Leu Gln Asp Asn Phe Gln Glu Asp Pro Ile Gln Met Ser Met Ile Ile Tyr Ser Cys Leu Lys Glu Glu 100 105 Arg Lys Ile Leu Glu Asn Ala Gln Arg Phe Asn Gln Ala Gln Ser Gly 120

Asn Ile Gln Ser Thr Val Met Leu Asp Lys Gln Lys Glu Leu Asp Ser

1991 (41) (41)

135

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Lys Val Arg Asn Val Lys Asp Lys Val Met 145

<210> 12

<211> 268

<212> PRT

<213> Mus musculus

<400> 12

Ser Cys Leu Lys Glu Glu Arg Lys Ile Leu Glu Asn Ala Gln Arg Phe 1 5 10 15

Asn Gln Ala Gln Ser Gly Asn Ile Gln Ser Thr Val Met Leu Asp.Lys 20 25 30

Gln Lys Glu Leu Asp Ser Lys Val Arg Asn Val Lys Asp Lys Val Met 35 40 45

Cys Ile Glu His Glu Ile Lys Ser Leu Glu Asp Leu Gln Asp Glu Tyr
50 55 60

Asp Phe Lys Cys Lys Thr Leu Gln Asn Arg Glu His Glu Thr Asn Gly 65 70 75 80

Val Ala Lys Ser Asp Gln Lys Gln Glu Gln Leu Leu Leu Lys Lys Met 85 90 95

Tyr Leu Met Leu Asp Asn Lys Arg Lys Glu Val Val His Lys Ile Ile
100 105 110

Glu Leu Leu Asn Val Thr Glu Leu Thr Gln Asn Ala Leu Ile Asn Asp 115 120 125

Glu Leu Val Glu Trp Lys Arg Gln Gln Ser Ala Cys Ile Gly Gly
130 140

Pro Pro Asn Ala Cys Leu Asp Gln Leu Gln Asn Trp Phe Thr Ile Val

Ala Glu Ser Leu Gln Gln Val Arg Gln Gln Leu Lys Lys Leu Glu Glu 165 170 175

Leu Glu Gln Lys Tyr Thr Tyr Glu His Asp Pro Ile Thr Lys Asn Lys 180 185 190

Gln Val Leu Trp Asp Arg Thr Phe Ser Leu Phe Gln Gln Leu Ile Gln 195 200 205

Ser Ser Phe Val Val Glu Arg Gln Pro Cys Met Pro Thr His Pro Gln 210 215 220

Arg Pro Leu Val Leu Lys Thr Gly Val Gln Phe Thr Val Lys Leu Arg 225 230 235 240

Leu Leu Val Lys Leu Gln Glu Leu Asn Tyr Asn Leu Lys Val Lys Val 245 250 255

Leu Phe Asp Lys Asp Val Asn Glu Arg Asn Thr Val 260 265

<210> 13 <211> 376 <212> PRT <213> Mus musculus <400> 13 Lys Gly Phe Arg Lys Phe Asn Ile Leu Gly Thr His Thr Lys Val Met Asn Met Glu Glu Ser Thr Asn Gly Ser Leu Ala Ala Glu Phe Arg His Leu Gln Leu Lys Glu Gln Lys Asn Ala Gly Thr Arg Thr Asn Glu Gly Pro Leu Ile Val Thr Glu Glu Leu His Ser Leu Ser Phe Glu Thr Gln Leu Cys Gln Pro Gly Leu Val Ile Asp Leu Glu Thr Thr Ser Leu Pro Val Val Ile Ser Asn Val Ser Gln Leu Pro Ser Gly Trp Ala Ser 85 90 Ile Leu Trp Tyr Asn Met Leu Val Ala Glu Pro Arg Asn Leu Ser Phe 100 Phe Leu Thr Pro Pro Cys Ala Arg Trp Ala Gln Leu Ser Glu Val Leu 120 Ser Trp Gln Phe Ser Ser Val Thr Lys Arg Gly Leu Asn Val Asp Gln Leu Asn Met Leu Gly Glu Lys Leu Leu Gly Pro Asn Ala Ser Pro Asp 145 150 155 Gly Leu Ile Pro Trp Thr Arg Phe Cys Lys Glu Asn Ile Asn Asp Lys Asn Phe Pro Phe Trp Leu Trp Ile Glu Ser Ile Leu Glu Leu Ile Lys Lys His Leu Leu Pro Leu Trp Asn Asp Gly Cys Ile Met Gly Phe Ile 200 Ser Lys Glu Arg Glu Arg Ala Leu Leu Lys Asp Gln Gln Pro Gly Thr Phe Leu Leu Arg Phe Ser Glu Ser Ser Arg Glu Gly Ala Ile Thr Phe 235 225 Thr Trp Val Glu Arg Ser Gln Asn Gly Glu Pro Asp Phe His Ala 250 Val Glu Pro Tyr Thr Lys Lys Glu Leu Ser Ala Val Thr Phe Pro Asp

Ile Ile Arg Asn Tyr Lys Val Met Ala Ala Glu Asn Ile Pro Glu Asn

Pro Leu Lys Tyr Leu Tyr Pro Asn Ile Asp Lys Asp His Ala Phe Gly 290 295 300

Lys Tyr Tyr Ser Arg Pro Lys Glu Ala Pro Glu Pro Met Glu Leu Asp 305 310 315 320

Gly Pro Lys Gly Thr Gly Tyr Ile Lys Thr Glu Leu Ile Ser Val Ser 325 330 335

Glu Val His Pro Ser Arg Leu Gln Thr Thr Asp Asn Leu Leu Pro Met \$340\$ \$345\$ \$350

Ser Pro Glu Glu Phe Asp Glu Val Ser Arg Ile Val Gly Ser Val Glu 355 360 365

Phe Asp Ser Met Met Asn Thr Val 370 375

<210> 14

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<212> PRT

<213> Mus musculus

<400> 14

Arg Cys Leu Trp Glu Glu Ser Arg Leu Leu Gln Thr Ala Ala Thr Ala 1 5 10 15

Ala Gln Gln Gly Gln Ala Asn His Pro Thr Ala Ala Val Val Thr 20 25 30

Glu Lys Gln Gln Met Leu Glu Gln His Leu Gln Asp Val Arg Lys Arg
35 40 45

Val Gln Asp Leu Glu Gln Lys Met Lys Val Val Glu Asn Leu Gln Asp
50 60

Asp Phe Asp Phe Asn Tyr Lys Thr Leu Lys Ser Gln Gly Asp Met Gln 65 70 75 80

Asp Leu Asn Gly Asn Asn Gln Ser Val Thr Arg Gln Lys Met Gln Gln 85 90 95

Leu Glu Gln Met Leu Thr Ala Leu Asp Gln Met Arg Arg Ser Ile Val 100 105 110

Ser Glu Leu Ala Gly Leu Leu Ser Ala Met Glu Tyr Val Gln Lys Thr 115 120 125

Leu Thr Asp Glu Glu Leu Ala Asp Trp Lys Arg Arg Pro Glu Ile Ala 130 135 140

Cys Ile Gly Gly Pro Pro Asn Ile Cys Leu Asp Arg Leu Glu Asn Trp 145 150 155 160

Ile Thr Ser Leu Ala Glu Ser Gln Leu Gln Thr Arg Gln Gln Ile Lys 165 170 175

Lys Leu Glu Glu Leu Gln Gln Lys Val Ser Tyr Lys Gly Asp Pro Ile 180 185 190 Val Gln His Arg Pro Met Leu Glu Glu Arg Ile Val Glu Leu Phe Arg 195 200 205

Asn Leu Met Lys Ser Ala Phe Val Val Glu Arg Gln Pro Cys Met Pro 210 215 220

Met His Pro Asp Arg Pro Leu Val Ile Lys Thr Gly Val Gln Phe Thr 225 230 235 240

Thr Lys Val Arg Leu Leu Val Lys Phe Pro Glu Leu 245 250

<210> 15

<211> 236

<212> PRT

<213> Mus musculus

<400> 15

Arg Cys Leu Trp Glu Glu Ser Arg Leu Leu Gln Thr Ala Ala Thr Ala 1 5 10 15

Ala Gln Gln Gly Gly Gln Ala Asn His Pro Thr Ala Ala Val Val Thr
20 25 30

Glu Lys Gln Gln Met Leu Glu Gln His Leu Gln Asp Val Arg Lys Arg 35 40 45

Val Gln Asp Leu Glu Gln Lys Met Lys Val Val Glu Asn Leu Gln Asp
50 55 60

Asp Phe Asp Phe Asn Tyr Lys Thr Leu Lys Ser Gln Gly Asp Met Gln 65 70 75 80

Asp Leu Asn Gly Asn Asn Gln Ser Val Thr Arg Gln Lys Met Gln Gln 90 95

Leu Glu Gln Met Leu Thr Ala Leu Asp Gln Met Arg Arg Ser Ile Val

Ser Glu Leu Ala Gly Leu Leu Ser Ala Met Glu Tyr Val Gln Lys Thr 115 120 125

Leu Thr Asp Glu Glu Leu Ala Asp Trp Lys Arg Arg Pro Glu Ile Ala 130 135 . 140

Cys Ile Gly Gly Pro Pro Asn Ile Cys Leu Asp Arg Leu Glu Asn Trp

Ile Thr Ser Leu Ala Glu Ser Gln Leu Gln Thr Arg Gln Gln Ile Lys

Lys Leu Glu Glu Leu Gln Gln Lys Val Ser Tyr Lys Gly Asp Pro Ile 180 185 190

Val Gln His Arg Pro Met Leu Glu Glu Arg Ile Val Glu Leu Phe Arg

Asn Leu Met Lys Ser Ala Phe Val Val Glu Arg Gln Pro Cys Met Pro 210 215 220 Met His Pro Asp Arg Pro Leu Val Ile Lys Thr Gly 225 230 235

<210> 16

<211> 176

<212> PRT

<213> Mus musculus

<400> 16

Arg Cys Leu Trp Glu Glu Ser Arg Leu Leu Gln Thr Ala Ala Thr Ala 1 5 10 15

Ala Gln Gln Gly Gly Gln Ala Asn His Pro Thr Ala Ala Val Val Thr 20 25 30

Glu Lys Gln Gln Met Leu Glu Gln His Leu Gln Asp Val Arg Lys Arg
35 40 45

Val Gln Asp Leu Glu Gln Lys Met Lys Val Val Glu Asn Leu Gln Asp
50 55 60

Asp Phe Asp Phe Asn Tyr Lys Thr Leu Lys Ser Gln Gly Asp Met Gln 65 70 75 80

Asp Leu Asn Gly Asn Asn Gln Ser Val Thr Arg Gln Lys Met Gln Gln 95

Leu Glu Gln Met Leu Thr Ala Leu Asp Gln Met Arg Arg Ser Ile Val

Ser Glu Leu Ala Gly Leu Leu Ser Ala Met Glu Tyr Val Gln Lys Thr 115 120 125

Leu Thr Asp Glu Glu Leu Ala Asp Trp Lys Arg Arg Pro Glu Ile Ala 130 135 140

Cys Ile Gly Gly Pro Pro Asn Ile Cys Leu Asp Arg Leu Glu Asn Trp 145 150 155 160

Ile Thr Ser Leu Ala Glu Ser Gln Leu Gln Thr Arg Gln Gln Ile Lys 165 170 175

<210> 17

<211> 143

<212> PRT

<213> Mus musculus

<400> 17

Arg Cys Leu Trp Glu Glu Ser Arg Leu Leu Gln Thr Ala Ala Thr Ala

Ala Gln Gln Gly Gly Gln Ala Asn His Pro Thr Ala Ala Val Val Thr 20 25 30

Glu Lys Gln Gln Met Leu Glu Gln His Leu Gln Asp Val Arg Lys Arg

Val Gln Asp Leu Glu Gln Lys Met Lys Val Val Glu Asn Leu Gln Asp 50 55 60

Asp Phe Asp Phe Asn Tyr Lys Thr Leu Lys Ser Gln Gly Asp Met Gln 65 70 75 80

Asp Leu Asn Gly Asn Asn Gln Ser Val Thr Arg Gln Lys Met Gln Gln 85 90 95

Leu Glu Gln Met Leu Thr Ala Leu Asp Gln Met Arg Arg Ser Ile Val
100 105 110

Ser Glu Leu Ala Gly Leu Leu Ser Ala Met Glu Tyr Val Gln Lys Thr 115 120 125

Leu Thr Asp Glu Glu Leu Ala Asp Trp Lys Arg Arg Pro Glu Ile 130 135 140

<210> 18

<211> 229

<212> PRT

<213> Mus musculus

<400> 18

Asn His Pro Thr Ala Ala Val Val Thr Glu Lys Gln Gln Met Leu Glu 1 5 10 15

Gln His Leu Gln Asp Val Arg Lys Arg Val Gln Asp Leu Glu Gln Lys 20 25 30

Met Lys Val Val Glu Asn Leu Gln Asp Asp Phe Asp Phe Asn Tyr Lys 35 40 45

Thr Leu Lys Ser Gln Gly Asp Met Gln Asp Leu Asn Gly Asn Asn Gln 50 55 60

Ser Val Thr Arg Gln Lys Met Gln Gln Leu Glu Gln Met Leu Thr Ala 65 70 75 80

Leu Asp Gln Met Arg Arg Ser Ile Val Ser Glu Leu Ala Gly Leu Leu 85 90 95

Ser Ala Met Glu Tyr Val Gln Lys Thr Leu Thr Asp Glu Glu Leu Ala 100 105 110

Asp Trp Lys Arg Arg Pro Glu Ile Ala Cys Ile Gly Gly Pro Pro Asn 115 120 125

Ile Cys Leu Asp Arg Leu Glu Asn Trp Ile Thr Ser Leu Ala Glu Ser 130 135 140

Gln Leu Gln Thr Arg Gln Gln Ile Lys Lys Leu Glu Glu Leu Gln Gln 145 150 155 160

Lys Val Ser Tyr Lys Gly Asp Pro Ile Val Gln His Arg Pro Met Leu 165 170 175

Glu Glu Arg Ile Val Glu Leu Phe Arg Asn Leu Met Lys Ser Ala Phe

Val Val Glu Arg Gln Pro Cys Met Pro Met His Pro Asp Arg Pro Leu 195 200 205

Val Ile Lys Thr Gly Val Gln Phe Thr Thr Lys Val Arg Leu Leu Val 210 215 220

Lys Phe Pro Glu Leu 225

<210> 19

<211> 213

<212> PRT

<213> Mus musculus

<400> 19

Asn His Pro Thr Ala Ala Val Val Thr Glu Lys Gln Gln Met Leu Glu 1 10 15

Gln His Leu Gln Asp Val Arg Lys Arg Val Gln Asp Leu Glu Gln Lys 20 25 30

Met Lys Val Val Glu Asn Leu Gln Asp Asp Phe Asp Phe Asn Tyr Lys 35 40 45

Thr Leu Lys Ser Gln Gly Asp Met Gln Asp Leu Asn Gly Asn Asn Gln 50 55 60

Ser Val Thr Arg Gln Lys Met Gln Gln Leu Glu Gln Met Leu Thr Ala 65 70 75 80

Leu Asp Gln Met Arg Arg Ser Ile Val Ser Glu Leu Ala Gly Leu Leu
85 90 95

Ser Ala Met Glu Tyr Val Gln Lys Thr Leu Thr Asp Glu Glu Leu Ala 100 105 110

Asp Trp Lys Arg Pro Glu Ile Ala Cys Ile Gly Gly Pro Pro Asn 115 120 125

Ile Cys Leu Asp Arg Leu Glu Asn Trp Ile Thr Ser Leu Ala Glu Ser 130 135 140

Gln Leu Gln Thr Arg Gln Gln Ile Lys Lys Leu Glu Glu Leu Gln Gln 145 150 155 160

Lys Val Ser Tyr Lys Gly Asp Pro Ile Val Gln His Arg Pro Met Leu 165 170 175

Glu Glu Arg Ile Val Glu Leu Phe Arg Asn Leu Met Lys Ser Ala Phe
180 190

Val Val Glu Arg Gln Pro Cys Met Pro Met His Pro Asp Arg Pro Leu 195 200 205

Val Ile Lys Thr Gly 210

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<210> 20
<211> 128
<212> PRT
<213> Mus musculus
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Val Gln Asp Leu Glu Gln Lys Met Lys Val Val Glu Asn Leu Gln Asp
1 5 10 15

Asp Phe Asp Phe Asn Tyr Lys Thr Leu Lys Ser Gln Gly Asp Met Gln 20 25 30

Asp Leu Asn Gly Asn Asn Gln Ser Val Thr Arg Gln Lys Met Gln Gln 35 40 45

Leu Glu Gln Met Leu Thr Ala Leu Asp Gln Met Arg Arg Ser Ile Val 50 55 60

Ser Glu Leu Ala Gly Leu Leu Ser Ala Met Glu Tyr Val Gln Lys Thr 65 70 75 80

Leu Thr Asp Glu Glu Leu Ala Asp Trp Lys Arg Arg Pro Glu Ile Ala 85 90 95

Cys Ile Gly Gly Pro Pro Asn Ile Cys Leu Asp Arg Leu Glu Asn Trp
100 105 110

Ile Thr Ser Leu Ala Glu Ser Gln Leu Gln Thr Arg Gln Gln Ile Lys

<210> 21 <211> 95 <212> PRT <213> Mus musculus

Asp Phe Asp Phe Asn Tyr Lys Thr Leu Lys Ser Gln Gly Asp Met Gln 20 25 30

Asp Leu Asn Gly Asn Asn Gln Ser Val Thr Arg Gln Lys Met Gln Gln
35 40 45

Leu Glu Gln Met Leu Thr Ala Leu Asp Gln Met Arg Arg Ser Ile Val

Ser Glu Leu Ala Gly Leu Leu Ser Ala Met Glu Tyr Val Gln Lys Thr 65 70 75 80

Leu Thr Asp Glu Glu Leu Ala Asp Trp Lys Arg Arg Pro Glu Ile 85 90 95

<210> 22 <211> 223 <212> PRT

<213> Mus musculus

<400> 22

Val Gln Asp Leu Glu Gln Lys Met Lys Val Val Glu Asn Leu Gln Asp 1 5 10 15

Asp Phe Asp Phe Asn Tyr Lys Thr Leu Lys Ser Gln Gly Asp Met Gln 20 25 30

Asp Leu Asn Gly Asn Asn Gln Ser Val Thr Arg Gln Lys Met Gln Gln 35 40 45

Leu Glu Gln Met Leu Thr Ala Leu Asp Gln Met Arg Arg Ser Ile Val 50 55 60

Ser Glu Leu Ala Gly Leu Leu Ser Ala Met Glu Tyr Val Gln Lys Thr 65 70 75 80

Leu Thr Asp Glu Glu Leu Ala Asp Trp Lys Arg Arg Pro Glu Ile Ala 85 90 95

Cys Ile Gly Gly Pro Pro Asn Ile Cys Leu Asp Arg Leu Glu Asn Trp 100 105 110

Ile Thr Ser Leu Ala Glu Ser Gln Leu Gln Thr Arg Gln Gln Ile Lys 115 120 125

Lys Leu Glu Glu Leu Gln Gln Lys Val Ser Tyr Lys Gly Asp Pro Ile 130 135 140

Val Gln His Arg Pro Met Leu Glu Glu Arg Ile Val Glu Leu Phe Arg

Asn Leu Met Lys Ser Ala Phe Val Val Glu Arg Gln Pro Cys Met Pro

Met His Pro Asp Arg Pro Leu Val Ile Lys Thr Gly Val Gln Phe Thr 180 185 190

Thr Lys Val Arg Leu Leu Val Lys Phe Pro Glu Leu Asn Tyr Gln Leu 195 200 205

Lys Ile Lys Val Cys Ile Asp Lys Asp Ser Gly Asp Val Ala Ala 210 220

<210> 23

<211> 185

<212> PRT

<213> Mus musculus

<400> 23

Gln Ser Val Thr Arg Gln Lys Met Gln Gln Leu Glu Gln Met Leu Thr 1 5 10 15

Ala Leu Asp Gln Met Arg Arg Ser Ile Val Ser Glu Leu Ala Gly Leu 20 25 30

Leu Ser Ala Met Glu Tyr Val Gln Lys Thr Leu Thr Asp Glu Glu Leu 35 40 45

Ala Asp Trp Lys Arg Arg Pro Glu Ile Ala Cys Ile Gly Gly Pro Pro 50 55 60

Asn Ile Cys Leu Asp Arg Leu Glu Asn Trp Ile Thr Ser Leu Ala Glu 65 70 75 80

Ser Gln Leu Gln Thr Arg Gln Gln Ile Lys Lys Leu Glu Glu Leu Gln 85 90 95

Gln Lys Val Ser Tyr Lys Gly Asp Pro Ile Val Gln His Arg Pro Met

Leu Glu Glu Arg Ile Val Glu Leu Phe Arg Asn Leu Met Lys Ser Ala 115 120 125

Phe Val Val Glu Arg Gln Pro Cys Met Pro Met His Pro Asp Arg Pro 130 135 140

Leu Val Ile Lys Thr Gly Val Gln Phe Thr Thr Lys Val Arg Leu Leu 145 150 155 160

Val Lys Phe Pro Glu Leu Asn Tyr Gln Leu Lys Ile Lys Val Cys Ile 165 170 175

Asp Lys Asp Ser Gly Asp Val Ala Ala 180 185

<210> 24

<211> 129

<212> PRT

<213> Mus musculus

<400> 24

Ile Ala Cys Ile Gly Gly Pro Pro Asn Ile Cys Leu Asp Arg Leu Glu
1 5 10 15

Asn Trp Ile Thr Ser Leu Ala Glu Ser Gln Leu Gln Thr Arg Gln Gln 20 25 30

Ile Lys Lys Leu Glu Glu Leu Gln Gln Lys Val Ser Tyr Lys Gly Asp 35 40 45

Pro Ile Val Gln His Arg Pro Met Leu Glu Glu Arg Ile Val Glu Leu
50 55 60

Phe Arg Asn Leu Met Lys Ser Ala Phe Val Val Glu Arg Gln Pro Cys 65 70 75 80

Met Pro Met His Pro Asp Arg Pro Leu Val Ile Lys Thr Gly Val Gln 85 90 95

Phe Thr Thr Lys Val Arg Leu Leu Val Lys Phe Pro Glu Leu Asn Tyr

Gln Leu Lys Ile Lys Val Cys Ile Asp Lys Asp Ser Gly Asp Val Ala 115 120 125

Ala

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<210> 25
<211> 96
<212> PRT
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<213> Mus musculus

<400> 25

Lys Lys Leu Glu Glu Leu Gln Gln Lys Val Ser Tyr Lys Gly Asp Pro 1 5 10 15

Ile Val Gln His Arg Pro Met Leu Glu Glu Arg Ile Val Glu Leu Phe 20 25 30

Arg Asn Leu Met Lys Ser Ala Phe Val Val Glu Arg Gln Pro Cys Met 35 40 45

Pro Met His Pro Asp Arg Pro Leu Val Ile Lys Thr Gly Val Gln Phe 50 55 60

Thr Thr Lys Val Arg Leu Leu Val Lys Phe Pro Glu Leu Asn Tyr Gln 65 70 75 80

Leu Lys Ile Lys Val Cys Ile Asp Lys Asp Ser Gly Asp Val Ala Ala 85 90 95

<210> 26 <211> 104 <212> PRT

<213> Rattus sp.

<400> 26

Met Thr Ala Lys Met Glu Thr Thr Phe Tyr Asp Asp Ala Leu Asn Ala 1 5 10 15

Ser Phe Leu Gln Ser Glu Ser Gly Ala Tyr Gly Ala Tyr Gly Tyr Ser 20 25 30

Asn Pro Lys Ile Leu Lys Gln Ser Met Thr Leu Asn Leu Ala Asp Pro
35 40 45

Val Gly Asn Leu Lys Pro His Leu Arg Ala Lys Asn Ser Asp Leu Leu 50 55 60

Thr Ser Pro Asp Val Gly Leu Leu Lys Leu Ala Ser Pro Glu Leu Glu 65 70 75 80

Arg Leu Ile Ile Gln Ser Ser Asn Gly His Ile Thr Thr Thr Pro Thr 85 90 95

Pro Thr Gln Phe Leu Cys Pro Lys

<210> 27 <211> 230 <212> PRT

AND REAL OF PERMINDER OF CHARLES IN THE COMMERCE OF THE PROPERTY OF THE PROPER

<213> Rattus sp.

<400> 27

Asn Val Thr Asp Glu Gln Glu Gly Phe Ala Glu Gly Phe Val Arg Gly

1 10 15

Leu Ala Glu Leu His Ser Gln Asn Arg Leu Pro Ser Val Thr Ser Ala
20 25 30

Ala Gl<br/>n Pro Val Ser Gly Ala Gly Met Val Ala Pro Ala Val Ala Ser<br/>  $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$ 

Val Ala Gly Ala Gly Gly Gly Tyr Ser Ala Thr Leu Gln Ser Glu
50 55 60

Pro Pro Val Tyr Ala Asn Leu Ser Asn Phe Asn Pro Gly Ala Leu Ser 65 70 75 80

Thr Gly Gly Gly Ala Pro Ser Tyr Gly Ala Thr Gly Leu Ala Phe Pro 90 95

Ser Arg Pro Gln Gln Gln Gln Gln Pro Pro Gln Pro Pro His His Leu
100 . 105 110

Pro Gln Gln Ile Pro Val Gln His Pro Arg Leu Gln Ala Leu Lys Glu 115 120 125

Glu Pro Gln Thr Val Pro Glu Met Pro Gly Glu Thr Pro Pro Leu Ser 130 135 140

Met Arg Asn Arg Ile Ala Ala Ser Lys Cys Arg Lys Arg Lys Leu Glu 165 170 175

Arg Ile Ala Arg Leu Glu Glu Lys Val Lys Thr Phe Lys Ala Gln Asn 180 185 190

Ser Glu Leu Ala Ser Thr Ala Asn Met Leu Arg Glu Gln Val Ala Gln 195 200 205

Leu Lys Gln Lys Val Met Asn His Val Asn Ser Gly Cys Gln Leu Met 210 215 220

Leu Thr Gln Gln Leu Gln 225 230

<210> 28

<211> 229

<212> PRT

<213> Mus musculus

<400> 28

Asn His Pro Thr Ala Ala Val Val Thr Glu Lys Gln Gln Met Leu Glu 1 5 10 15

Gln His Leu Gln Asp Val Arg Lys Arg Val Gln Asp Leu Glu Gln Lys 20 25 30

- Met Lys Val Val Glu Asn Leu Gln Asp Asp Phe Asp Phe Asn Tyr Lys
  35 40 45
- Thr Leu Lys Ser Gln Gly Asp Met Gln Asp Leu Asn Gly Asn Asn Gln 50 55 60
- Ser Val Thr Arg Gln Lys Met Gln Gln Leu Glu Gln Met Leu Thr Ala 65 70 75 80
- Leu Asp Gln Met Arg Arg Ser Ile Val Ser Glu Leu Ala Gly Leu Leu 85 90 95
- Ser Ala Met Glu Tyr Val Gln Lys Thr Leu Thr Asp Glu Glu Leu Ala 100 105 110
- Asp Trp Lys Arg Arg Pro Glu Ile Ala Cys Ile Gly Gly Pro Pro Asn 115 120 125
- Ile Cys Leu Asp Arg Leu Glu Asn Trp Ile Thr Ser Leu Ala Glu Ser 130 135 140
- Gln Leu Gln Thr Arg Gln Gln Ile Lys Lys Leu Glu Glu Leu Gln Gln 145 150 155 160
- Lys Val Ser Tyr Lys Gly Asp Pro Ile Val Gln His Arg Pro Met Leu 165 170 175
- Glu Glu Arg Ile Val Glu Leu Phe Arg Asn Leu Met Lys Ser Ala Phe 180 185 190
- Val Val Glu Arg Gln Pro Cys Met Pro Met His Pro Asp Arg Pro Leu 195 200 205
- Val Ile Lys Thr Gly Val Gln Phe Thr Thr Lys Val Arg Leu Leu Val 210 215 220

Lys Phe Pro Glu Leu 225

<210> 29

<211> 229

<212> PRT

<213> Mus musculus

<400> 29

- Asn His Pro Thr Ala Ala Val Val Thr Glu Lys Gln Gln Met Leu Glu

  1 5 10 15
- Gln His Leu Gln Asp Val Arg Lys Arg Val Gln Asp Leu Glu Gln Lys
  20 25 30
- Met Lys Val Val Glu Asn Leu Gln Asp Asp Phe Asp Phe Asn Tyr Lys 35 40 45
- Thr Leu Lys Ser Gln Gly Asp Met Gln Asp Leu Asn Gly Asn Asn Gln 50 55 60
- Ser Val Thr Arg Gln Lys Met Gln Gln Leu Glu Gln Met Leu Thr Ala 65 70 75 80

Leu Asp Gln Met Arg Arg Ser Ile Val Ser Glu Leu Ala Gly Leu Leu 85 90 95

Ser Ala Met Glu Tyr Val Gln Lys Thr Leu Thr Asp Glu Glu Leu Ala 100 105 110

Asp Trp Lys Arg Arg Pro Glu Ile Ala Cys Ile Gly Gly Pro Pro Asn 115 120 125

Ile Cys Leu Asp Arg Leu Glu Asn Trp Ile Thr Ser Leu Ala Glu Ser 130 135 140

Lys Val Ser Tyr Lys Gly Asp Pro Ile Val Gln His Arg Pro Met Leu 165 170 175

Glu Glu Arg Ile Val Glu Leu Phe Arg Asn Leu Met Lys Ser Ala Phe 180 185 190

Val Val Glu Arg Gln Pro Cys Met Pro Met His Pro Asp Arg Pro Leu 195 \_ 200 205

Val Ile Lys Thr Gly Val Gln Phe Ala Thr Ala Val Ala Leu Leu Val 210 215 220

Lys Phe Pro Glu Leu 225

<210> 30

<211> 229

<212> PRT

<213> Mus musculus

<400> 30

Asn His Pro Thr Ala Ala Val Val Thr Glu Lys Gln Gln Met Leu Glu

1 10 15

Gln His Ala Gln Asp Val Arg Lys Arg Val Gln Asp Leu Glu Gln Lys
20 25 30

Met Lys Val Val Glu Asn Leu Gln Asp Asp Phe Asp Phe Asn Tyr Lys 35 40 45

Thr Leu Lys Ser Gln Gly Asp Met Gln Asp Leu Asn Gly Asn Asn Gln 50 55 60

Ser Val Thr Arg Gln Lys Met Gln Gln Leu Glu Gln Met Leu Thr Ala 65 70 75 80

Leu Asp Gln Met Arg Arg Ser Ile Val Ser Glu Leu Ala Gly Leu Leu 85 90 95

Ser Ala Met Glu Tyr Val Gln Lys Thr Leu Thr Asp Glu Glu Leu Ala 100 105 110

Asp Trp Lys Arg Arg Pro Glu Ile Ala Cys Ile Gly Gly Pro Pro Asn 115 120 125

Ile Cys Leu Asp Arg Leu Glu Asn Trp Ile Thr Ser Leu Ala Glu Ser 130 135 140

Lys Val Ser Tyr Lys Gly Asp Pro Ile Val Gln His Arg Pro Met Leu 165 170 175

Glu Glu Arg Ile Val Glu Leu Phe Arg Asn Leu Met Lys Ser Ala Phe 180 185 190

Val Val Glu Arg Gln Pro Cys Met Pro Met His Pro Asp Arg Pro Leu 195 200 205

Val Ile Lys Thr Gly Val Gln Phe Thr Thr Lys Val Arg Leu Leu Val 210 215 220

Lys Phe Pro Glu Leu 225

<210> 31

<211> 229

<212> PRT

<213> Mus musculus

<400> 31

Asn His Pro Thr Ala Ala Val Val Thr Glu Lys Gln Gln Met Leu Glu

1 5 10 15

Gln His Leu Gln Asp Ala Arg Lys Arg Val Gln Asp Leu Glu Gln Lys
20 25 30

Met Lys Val Val Glu Asn Leu Gln Asp Asp Phe Asp Phe Asn Tyr Lys

Thr Leu Lys Ser Gln Gly Asp Met Gln Asp Leu Asn Gly Asn Asn Gln 50 55 60

Ser Val Thr Arg Gln Lys Met Gln Gln Leu Glu Gln Met Leu Thr Ala 65 70 75 80

Leu Asp Gln Met Arg Arg Ser Ile Val Ser Glu Leu Ala Gly Leu Leu 85 90 95

Ser Ala Met Glu Tyr Val Gln Lys Thr Leu Thr Asp Glu Glu Leu Ala 100 105 110

Asp Trp Lys Arg Arg Pro Glu Ile Ala Cys Ile Gly Gly Pro Pro Asn 115 120 125

Ile Cys Leu Asp Arg Leu Glu Asn Trp Ile Thr Ser Leu Ala Glu Ser 130 135 140

Gln Leu Gln Thr Arg Gln Gln Ile Lys Lys Leu Glu Glu Leu Gln Gln 145 150 155 160

Lys Val Ser Tyr Lys Gly Asp Pro Ile Val Gln His Arg Pro Met Leu 165 170 175

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Glu Glu Arg Ile Val Glu Leu Phe Arg Asn Leu Met Lys Ser Ala Phe
                                 185
 Val Val Glu Arg Gln Pro Cys Met Pro Met His Pro Asp Arg Pro Leu
 Val Ile Lys Thr Gly Val Gln Phe Thr Thr Lys Val Arg Leu Leu Val
 Lys Phe Pro Glu Leu
 225
 <210> 32
 <211> 21
 <212> PRT
 <213> Homo sapien
 Ala Ala Val Val Thr Glu Lys Gln Gln Met Leu Glu Gln His Leu Gln
                                       10
 Asp Val Arg Lys Arg
<210> 33
 <211> 13
 <212> PRT
 <213> Homo sapien
 <400> 33
 Gly Val Gln Phe Thr Thr Lys Val Arg Leu Leu Val Lys
 <210> 34
 <211> 21
 <212> PRT
 <213> Homo sapien
 <400> 34
 Ser Thr Val Met Leu Asp Lys Gln Lys Glu Leu Asp Ser Lys Val Arg
 Asn Val Lys Asp Lys
  <210> 35
  <211> 13
  <212> PRT
 <213> Homo sapien
  <400> 35
  Gly Val Gln Phe Thr Val Lys Leu Arg Leu Leu Val Lys
  <210> 36
  <211> 21
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<212> PRT
<213> Homo sapien
Glu Thr Pro Val Glu Ser Gln Gln His Glu Ile Glu Ser Arg Ile Leu
Asp Leu Arg Ala Met
<210> 37
<211> 13
<212> PRT
<213> Homo sapien
<400> 37
Gly Ser Lys Phe Thr Val Arg Thr Arg Leu Leu Val Arg
<210> 38
<211> 21
<212> PRT
<213> Homo sapien
<400> 38
Ser Ser Ser Val Ser Glu Arg Gln Arg Asn Val Glu His Lys Val Ala
Ala Ile Lys Asn Ser
<210> 39
<211> 13
<212> PRT
<213> Homo sapien
<400> 39
Leu Ile Gln Phe Thr Val Lys Leu Arg Leu Leu Ile Lys
<210> 40
<211> 21
<212> PRT
<213> Homo sapien
<400> 40
His Leu Gln Ile Asn Gln Thr Phe Glu Glu Leu Arg Leu Val Thr Gln
Lys Thr Glu Asn Glu
             20
<210> 41
<211> 13
<212> PRT
<213> Homo sapien
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